SAC **Springfield Auto Care** EXAMPLE SHOP
service@springfield-auto-care.example

2003 Nissan Xterra at 168,000 mi

5N1ED28Y23C654321

MODEL / CHASSIS	ENGINE	MILEAGE	DRIVETRAIN
Xterra · WD22 Xterra XE V6 4x4	Nissan VG33E 3.3L V6 and supercharged VG33ER (2000–2004)	168,000 mi	4WD
BUILD MONTH	**REPORT DATE**	**MODE**	**PREPARED FOR**
Not entered (door jamb)	October 28, 2026	Shop	Sample Owner

VIN check: check digit valid; model-year code '3' = 2003, matches the year entered. The VIN doesn't record the build month. Sample report: synthetic VIN.

1 · SUMMARY

What this car needs, in order

Each item compares this car's mileage with when owners and shops report the part failing. It is not an inspection: our technician decides what the car actually needs.

1
job recommended now

0
to plan in the next 30,000 miles · plus 2 factory maintenance items

2
to watch or check at each service

Safety recalls NHTSA lists for this model year (2 of 3)

- **04V-230** · Fuel system, gasoline · delivery · fuel pump: The fuel pump terminal on the sending unit can crack and corrode until it breaks, so the engine will not start or stops running without warning. Dealers replace the sending unit or inspect and seal the terminal.
- **10V-554** · Steering · column: The steering column lower shaft can break during low-speed, full-lock turns, so the driver can lose steering control. Dealers inspect and replace the shaft.

A model-year list, not a VIN check. The full report lists the others. Repairs are free at a Nissan dealer if open. On a car over 15 years old, ask the dealer whether a newer recall is still repaired free. Check this VIN at nhtsa.gov/recalls.

Step 0 · Free: run the VIN at nhtsa.gov/recalls and ask a Nissan dealer for a campaign printout, including 04V-230. Read the build month (MM/YY) on the driver's door-jamb label.

Recommended now at the next service

Fuel pump terminal corrodes on the sending unit: stall or no start (recall 04V-230) Free if open

Recall 04V-230 is listed for this model year. Check the VIN; the repair is free at a Nissan dealer if it is open.

Next 12 months up to about 175,000 mi

Nothing scheduled here.

Within the next 30,000 miles up to 198,000 mi

Nothing else enters its reported range in this window.

Watch inspect at each service, fix on condition, or optional

Cracked right-hand exhaust manifold (tick, exhaust smell) **$480**

Any mileage (1999–2001 Frontier and 2000–2001 Xterra (bulletin); owners report it on later trucks too) · Inspect at each service; fix at the first sign

our price EXAMPLE

Rough idle, misfire or wet-weather stalling (mounts, injectors, distributor) **$140**

Any mileage (1999–2000 Frontier and 2000 Xterra bulletins; injector cleaning bulletin for several Nissans) · Inspect at each service; fix at the first sign

our price EXAMPLE

Recommended now

Free recall check

Springfield Auto Care prices (example)

Planned through 198,000 mi

From $428

Now + next 12 months + next 30,000 miles, with the factory maintenance on this report if the records don’t show it done. Excludes “watch” and optional items.

Prices are Springfield Auto Care's estimates for typical parts and labor. They don't include tax, shop supplies or disposal fees, and may change after inspection or if part prices change. Not a written repair estimate: Springfield Auto Care confirms the price and gets your OK before any work.

Bundled jobs are priced together because the labor overlaps. Routine service (oil, brakes, tires) isn't included; factory fluid and spark plug intervals are listed below.

FACTORY MAINTENANCE

Scheduled maintenance from 168,000 mi to 198,000 mi

The maker's normal schedule for this car. Service history isn't known here, so an item is shown at its next interval mark; skip it if the records show it was done.

ITEM	INTERVAL	THIS CAR	OUR PRICE
Spark plugs Iridium/platinum plugs; replace early if gap exceeds spec.	every 105,000 mi	**Was due at 105,000 mi (check records)** [M1][M2]	**$249**
Engine coolant First change at 60,000 mi or 48 months, then every 30,000 mi or 24 months.	first at 60,000 mi, then every 30,000 mi or 2 years	**Was due at 150,000 mi and by age (check records)** [M1][M2]	**From $179**
Automatic transmission fluid Nissan normal schedule says inspect only; replace every 30,000 mi / 24 months only under severe use (towing, rough or muddy roads).	no fixed interval	— [M1][M2]	—

M1. 2001 Nissan Frontier Owner's Manual, Maintenance section (KA24DE / VG33E) OFFICIAL
https://archive.org/details/manualzilla-id-6028880

M2. Nissan USA official maintenance schedule lookup: 2003 Xterra (component pages, Standard Driving Conditions) OFFICIAL
https://maintenance-schedules.nissanusa.com/maintenance-schedules/2003/xterra/components/engine-coolant/

WHERE 168K SITS FOR EACH WEAK POINT

#	WEAK POINT	REPORTED RANGE	THIS CAR
1	Fuel pump terminal corrodes on the sending unit: stall or no start (recall 04V-230)	39,000–68,000 mi (middle half of 16 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA	● Long past the range
2	Cracked right-hand exhaust manifold (tick, exhaust smell)	1999–2001 Frontier and 2000–2001 Xterra (bulletin); owners report it on later trucks too OFFICIAL	● Any mileage
3	Rough idle, misfire or wet-weather stalling (mounts, injectors, distributor)	1999–2000 Frontier and 2000 Xterra bulletins; injector cleaning bulletin for several Nissans OFFICIAL	● Any mileage

Colors compare mileage with reported failures, not the car's condition. Red: past the range. Amber: inside or approaching. Green: below, or not listed for a recall.

2 · RECALLS AND BULLETINS

Recalls to check for this 2003 Nissan Xterra

Safety recall repairs are free at Nissan dealers. On a car over 15 years old, ask the dealer whether a newer recall is still repaired free. Nothing here can tell whether a recall is open or already done on this VIN; only the official VIN lookup or a dealer can.

Official VIN check (2 minutes)

1. Go to nhtsa.gov/recalls and enter 5N1ED28Y23C654321.
2. Note every recall shown as “Recall incomplete” and keep a screenshot.
3. Ask a Nissan dealer for a campaign printout; it also lists completed campaigns.

3.3L VG33E / VG33ER V6 RECALLS WE TRACK

04V-230 · Fuel pump terminal on the sending unit can corrode; engine may stall or not start

NHTSA lists this model and year: check by VIN

The terminal can crack and corrode until the fuel pump stops. Sending unit replaced (salt-belt states) or inspected and sealed, free. OFFICIAL [2]

☐ VIN checked ☐ Open: booked with dealer ☐ Completed (printout kept)

EVERY RECALL NHTSA LISTS FOR THE 2003 NISSAN XTERRA (3)

RECALL	COMPONENT	WHAT CAN HAPPEN (NHTSA, SHORTENED)
04V-230 3.3L VG33E / VG33ER V6 tracked	Fuel system, gasoline · delivery · fuel pump	The fuel pump terminal on the sending unit can crack and corrode until it breaks, so the engine will not start or stops running without warning. Dealers replace the sending unit or inspect and seal the terminal. Details
10V-554	Steering · column	The steering column lower shaft can break during low-speed, full-lock turns, so the driver can lose steering control. Dealers inspect and replace the shaft. Details
02V-299	Suspension · rear	Water can get into the rear axle housing past the ABS sensor seal, so the rear wheel bearing can corrode and eventually fail. Dealers inspect and reseal, and replace damaged bearings. Details

Source: NHTSA recalls API, fetched 2026-10-28 and combined across NHTSA model names: XTERRA. Safety categories (air bags, fire, brakes, stalling, roll-away and loss of control) are listed first; listings whose NHTSA text names another engine, or an aftermarket part, go last. OFFICIAL

SERVICE ACTIONS, BULLETINS AND WARRANTY PROGRAMS

Manufacturer bulletins and warranty programs for this engine are cited on each weak point in section 4, where they apply.

4 · THE 3 WEAK POINTS

Each weak point, one card each

Every figure carries its source. Retailer part numbers are shown only when the retailer lists them for this chassis (WD22). Left out because they apply to other models, years, engine sizes or body codes: Sticky accelerator pedal from throttle-body deposits; Coolant leak at the intake manifold water outlet; Supercharged VG33ER: fail-safe at full throttle (recall) and supercharger noise.

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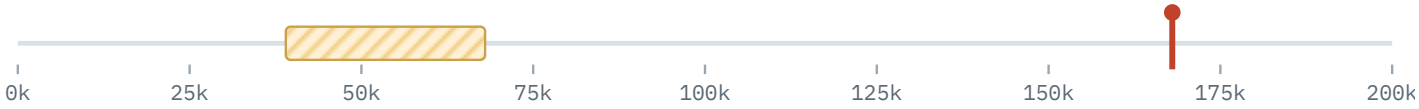
1 Fuel pump terminal corrodes on the sending unit: stall or no start (recall 04V-230)

Long past the range

Severity: High: overheating, stalls, limp mode or a big bill · 141 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 168,000 mi this car is long past the reported range (39,000–68,000 mi (middle half of 16 owner complaints that state a mileage)). Many cars at this mileage have already had this repaired, and some never had the fault. Check the records and the part itself before planning it. Range: 39,000–68,000 mi (middle half of 16 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA [1]



WHAT FAILS OFFICIAL [2]

The fuel pump terminal on the fuel-sending unit (in the tank) can crack, let water in and corrode until the pump loses power. The engine then stalls without warning or will not start. Nissan recalled 2000–2003 Xterras and V6 Frontiers: in salt-belt states the sending unit is replaced, elsewhere it is inspected and replaced or sealed. Owners also report fuel gauges reading wrong before the failure.

SYMPTOMS

- Engine dies while driving and will not restart
- Cranks but will not start
- Fuel gauge reads wrong or drops suddenly

IF IT'S LEFT TOO LONG

A stall in traffic can cause a crash; the truck may need a tow.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Check the VIN for recall 04V-230; a sending unit that was only sealed can still corrode later.

ESTIMATED REPAIR COST

Owner-reported repair bills in NHTSA complaints (n=14)	**Our price is in the plan above** ask us for a written quote
Owner-reported repair bills in NHTSA complaints (n=14)	**$490–$890** COMPUTED FROM NHTSA DATA [1] reported range for the bill after a failure

Where the numbers come from: Computed from 14 NHTSA owner complaints that quote a bill for the fuel pump or sending unit (middle half of the bills; median $550). Examples: ODI 10320185, 10010998, 10008135, 10058501. Owner-reported, often dealer prices; not shop quotes. Free if the recall was never done.

PARTS FOR WD22

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Recall 04V-230 done, and was the unit replaced or only sealed?
- Any stalling or no-starts?

2 Cracked right-hand exhaust manifold (tick, exhaust smell)

Any mileage

Severity: Medium: leaks and wear · 39 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (1999–2001 Frontier and 2000–2001 Xterra (bulletin); owners report it on later trucks too), so mileage doesn't say much here. Range: 1999–2001 Frontier and 2000–2001 Xterra (bulletin); owners report it on later trucks too OFFICIAL [6]

WHAT FAILS OFFICIAL [6]

The right-hand exhaust manifold can crack, which makes a ticking noise that is loudest on a cold start and can let exhaust into the engine bay. Nissan issued a bulletin for early Frontiers and Xterras, and owners report cracked manifolds and broken studs on later trucks as well.

SYMPTOMS

- Ticking from the right side of the engine when cold
- Exhaust smell
- Check-engine light with oxygen sensor codes

IF IT'S LEFT TOO LONG

Exhaust leaks get louder, can upset the oxygen sensor and can let fumes into the cabin.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Have the manifold checked for cracks and broken studs when it starts to tick.

ESTIMATED REPAIR COST

Exhaust manifold gasket replacement, Xterra (RepairPal)	**Our price is in the plan above** ask us for a written quote
Exhaust manifold gasket replacement, Xterra (RepairPal); a new manifold costs more	**$409–$573** SHOP/RETAILER [7] reported range for the bill after a failure

Where the numbers come from: RepairPal average for an Xterra exhaust manifold gasket job; a cracked manifold or broken studs add parts and time.

PARTS FOR WD22

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Any ticking on cold start?
- Exhaust manifold or studs ever replaced?

3 Rough idle, misfire or wet-weather stalling (mounts, injectors, distributor)

Any mileage

Severity: Medium: leaks and wear · 11 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (1999–2000 Frontier and 2000 Xterra bulletins; injector cleaning bulletin for several Nissans), so mileage doesn't say much here. Range: 1999–2000 Frontier and 2000 Xterra bulletins; injector cleaning bulletin for several Nissans OFFICIAL [9][10][11]

WHAT FAILS OFFICIAL [9][10][11]

Nissan issued several bulletins for rough running on the VG33E: engine mounts and a special ECM program for rough idle or idle vibration, fuel injector cleaning for rough idle, hesitation and P0300-series misfire codes, and water getting into the distributor, which can cause misfires or stalling in rain.

SYMPTOMS

- Rough idle or vibration at a stop
- Hesitation or misfire codes (P0300–P0306)
- Stalling or misfire in heavy rain

IF IT'S LEFT TOO LONG

Misfires can damage the catalytic converters.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Check the mounts, the distributor cap and seal, and the injectors before replacing bigger parts.

ESTIMATED REPAIR COST

No published price	**Our price is in the plan above** ask us for a written quote
No published price	**No published price** reported range for the bill after a failure

PARTS FOR WD22

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Rough idle or stalling in rain?
- Mounts, injectors or distributor replaced?

5 · ALSO REPORTED, NOT RANKED

Other themes in 3.3L VG33E / VG33ER V6 owner complaints

Every NHTSA complaint theme with 10 or more counted reports is either a weak point above or explained here.

THEME	COMPLAINTS	WHY IT ISN'T A WEAK POINT
Brakes	307	Brake complaints (ABS, rotors, lines); not engine faults.
Frame, axle and body rust	231	Body, fuel-tank, rear-axle and frame rust (recalls 02V-299 rear axle, 11V-244 Pathfinder frame); not an engine fault.
Steering / suspension	230	Steering and suspension complaints (recall 10V-554 steering shaft on 2002–2004 Frontier); not engine faults.
Air bags	140	Air bag complaints; not engine faults.
Stalling	139	Most stalls in these complaints are the fuel-pump terminal (recall 04V-230), covered under that weak point; the rest have mixed causes.
Automatic transmission	104	Transmission complaints are spread across shifting and clutch faults; no single bulletin pattern on this engine.

How this report is built

Inputs. VIN, model year, model, mileage and build month (if entered). Model and engine are checked with NHTSA's vPIC decoder.

Mileage positions. Below: more than 10,000 miles before the reported range. Approaching: within 10,000. Inside: in the range, or past the start of an open-ended range. Past: beyond the top of the range. These bands are our rules, not an industry standard.

The plan. Critical items inside or past their range go first; high-severity items follow, and jobs that share labor are bundled. At most three jobs land in “Recommended now”. Leaks that are cheap to watch are fixed on condition; inspections are asked for at each service.

Costs. Published independent-shop ranges from shop quotes, retailer prices and owner reports. Shop prices come from the issuing shop. The worst-case cost of every item failing is not shown: it isn't an expected cost.

Labels. `OFFICIAL` NHTSA/Nissan documents · `SHOP/RETAILER` parts prices and shop articles · `FORUM/BLOG` owner forums and blogs · `COMPUTED FROM NHTSA DATA` our analysis of NHTSA data · `OUR ESTIMATE` ours.

NHTSA complaint data. Pulled Oct 28, 2026 from NHTSA's complaints API for 2000–2004 Frontier and Xterra complaints that do not name the 2.4L four, plus all 2000 Pathfinder and QX4 and 2000–2002 Quest and Villager complaints. Truck complaints that name no engine may include some four-cylinder trucks: 1,834 complaints. Some of these nameplates were sold with other engines too; for those we left out complaints whose text names another engine or a hybrid, so a few complaints about other engines can remain. Themes are keyword matches on the complaint text. `COMPUTED FROM NHTSA DATA`

THEME	COMPLAINTS	IN THIS REPORT
Brakes	307	Also reported
Frame, axle and body rust	231	Also reported
Steering / suspension	230	Also reported
Fuel pump / sending unit / gauge	141	Item 1
Air bags	140	Also reported
Stalling	139	Also reported
Automatic transmission	104	Also reported
Sticky accelerator / throttle	67	Other years or engine sizes
Exhaust manifold / exhaust leak	39	Item 2
Coolant leak / overheating	30	Other years or engine sizes
Rough idle / misfire	11	Item 3

Limits: complaints are self-reported and not adjusted for cars sold; keyword matching over- and under-counts; owners rarely file safety complaints about oil seeps, so leaks look rarer than they are.

SOURCES

1. NHTSA owner complaints for 2000–2004 Frontier and Xterra (complaints that do not name the 2.4L four), 2000 Pathfinder, 2000 Infiniti QX4, 2000–2002 Quest and 2000–2002 Mercury Villager, pulled Oct 28, 2026 (ODI numbers in the cost notes) OFFICIAL
https://www.nhtsa.gov/report-a-safety-problem#complaints

2. NHTSA recall records: 04V-230 (1999–2003 Frontier V6 and 2000–2003 Xterra: the fuel pump terminal on the fuel-sending unit can crack and corrode, so the pump stops and the engine will not start or stalls; sending unit replaced in salt-belt states, inspected and sealed or replaced elsewhere), checked Oct 28, 2026 OFFICIAL
https://www.nhtsa.gov/recalls?nhtsaId=04V230000

3. Nissan NTB00-083: 1999–2000 Quest: idle speed fluctuation, incorrect idle speed, increased accelerator pedal resistance and difficulty accelerating smoothly from a stop (2000-10-17; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=618802

4. Nissan dealer legal notice regarding NTB00-083: increased accelerator pedal resistance from throttle-chamber deposits, 1999–2000 Quest (2003-08-22; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=10004441

5. Ford campaign CSP-0-N-11: certain 1999–2000 Mercury Villager vans to have the throttle body cleaned (2008-07-31; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=10026364

6. Nissan NTB01-038: right-hand exhaust manifold cracking, 1999–2001 Frontier and 2000–2001 Xterra (2001-05-22; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=630975

7. RepairPal: Nissan Xterra exhaust manifold gasket replacement cost, checked Oct 28, 2026 SHOP/RETAILER
https://repairpal.com/estimator/nissan/xterra/exhaust-manifold-gasket-replacement-cost

8. Nissan NTB02-044: coolant leak from the intake manifold water outlet, 2000–2002 Frontier and Xterra (2002-04-10; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=633628

9. Nissan NTB00-096A: VG33E rough idle / idle vibration: engine mounts and special ECM programs, 1999–2000 Frontier and 2000 Xterra (2001-06-06; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=623299

10. Nissan NTB01-033A: fuel injector cleaning for rough idle, hesitation or MIL with P0300-series misfire codes (2001-10-03; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=625512

11. Nissan NTB00-086: water may have entered the distributor assembly, Frontier and 2000 Xterra (2000-10-25; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=618789

12. NHTSA recall records: 02V-298 (2002 Frontier and Xterra with the supercharger: at full throttle in low gear when cold, intake air flow can exceed the air-flow-meter limit so the engine goes into fail-safe and will not rev past 2,400 rpm; ECM reprogrammed), checked Oct 28, 2026 OFFICIAL
https://www.nhtsa.gov/recalls?nhtsaId=02V298000

13. Nissan NTB04-083: supercharger noise at idle and lack of power (2004-07-14; NHTSA summary only), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=10008834

This report contains no affiliate links; retailer prices are quoted as price sources only. Found an error? Email hello@repairahead.com.

PLEASE READ

Important

Based on public records and published repair costs. Not a diagnosis or a guarantee. Your technician's inspection decides what your car needs. Confirm recalls with a dealer using your VIN.

Informational only. This report is not a mechanical inspection, a diagnosis, or professional, legal or financial advice. It was issued by Springfield Auto Care using RepairAhead data; the inspection findings and prices are the shop's.

Reported ranges and estimates, not predictions

Failure mileages are reported ranges compiled from public owner complaints, manufacturer bulletins, recalls and repair-shop reports. Costs are estimates. Parts can fail earlier, later or not at all, and other problems can occur. Statistics from owner complaints describe past reports to NHTSA; NHTSA has not reviewed or endorsed this analysis.

Safety issues go to a dealer

If you notice overheating, a burning or fuel smell, smoke, a brake-assist problem, stalling or loss of power, pull over when it's safe and contact a Nissan dealer or qualified shop. Safety recall repairs are free at Nissan dealers. Confirm recalls for this VIN at nhtsa.gov/recalls.

No warranty

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Based on public records and published repair costs. Not a diagnosis or a guarantee. Your technician's inspection decides what your car needs. Confirm recalls with a dealer using your VIN.